

Wholesale Electricity Market Rule Change Proposal Submission

RC_2014_03

Administrative Improvements to the Outage Process

Submitted by

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Submissions on Rule Change Proposals can be sent by:

Email to: support@rcpwa.com.au

Post to: Rule Change Panel
Attn: Executive Officer
C/o Economic Regulation Authority
PO Box 8469
PERTH BC WA 6849

1. Please provide your views on the proposal, including any objections or suggested revisions.

Synergy appreciates the opportunity to provide feedback in response to the call for further submissions: Administrative Improvements to the Outage Process (RC_2014_03).

Synergy notes that the Rule Change Panel has requested feedback on 26 questions as part of its call for further submissions. Although supportive of some of the proposed changes, Synergy has concerns with the operational implications of others. These concerns include, but are not limited to:

Question 6: *Whether a Rule Participant should be obliged to notify System Management if it is aware that its Outage Facility will suffer a Forced Outage in the future.*

Synergy recognises the intent of the Rule Change Proposal (Proposal) and supports the notion that Rule Participants should advise System Management of impending Forced Outages.

However, the wording that a Rule Participant should notify System Management 'as soon as it becomes aware' of an upcoming Forced Outage is vague and up for interpretation. 'In the

future' bears similar issues in that the timeframe is too vast. The implications on Rule Participants are also unknown in the event of these occurrences.

Further, incidence of a forced outage may be of a certain urgency. At such times, it may be more practical for a person who has become aware of the issue to first focus on resolving it rather than prioritising the immediate notification to System Management.

Therefore, Synergy recommends that although notifications to System Management should be made an obligation, it should be managed on a best endeavours basis.

Question 12: *Viable alternatives to the Rule Change Panel's proposed approach for reporting unadjusted outage quantities for Scheduled Generators that have failed to comply with an instruction from System Management (e.g. where a Scheduled Generator trips off during a Trading Interval, fails to synchronise when expected or fails to achieve the output levels specific in its Dispatch Instructions).*

Participants are obligated to log Forced Outages upon deviation from dispatch instructions from System Management. If this occurs, the Rule Change Panel has proposed that the Available Capacity is the average MW output over the Trading Interval.

In essence,

$$\begin{aligned} \text{Total unadjusted outage quantity} \\ = \text{Maximum sent out capacity} - (\text{Sent Out Metered Scheduled} \times 2) \end{aligned}$$

Synergy considers that the proposed amendment unfairly penalises Market Generators who have available capacity but are generating at a lower level due to dispatch instructions during the trading interval in which the outage occurs.

For instance, if a Scheduled Generator with a maximum sent out capacity of 330MW received a dispatch instruction to dispatch at 300MW and trips at the last minute of the last trading interval, a Forced Outage would be logged for the last trading interval. According to the Rule Change Panel's proposed amendment, the total unadjusted outage quantity for that Trading Interval would equal to 40MW.

Scenario 1:

$$\text{Sent Out Metered Scheduled}_1 = \frac{1}{2} \times \left(\frac{29}{30} \times 300\text{MW} + \frac{1}{30} \times 0\text{MW} \right) = 145\text{MWh}$$

$$\text{Total unadjusted outage quantity}_1 = 330\text{MW} - (145\text{MWh} \times 2) = 40\text{MW}$$

However, if the same Scheduled Generator received a dispatch instruction to dispatch at 10MW and trips at the last minute of the last trading interval, the total unadjusted outage quantity for that Trading Interval would equal to 320.3MW.

Scenario 2:

$$\text{Sent Out Metered Scheduled}_2 = \frac{1}{2} \times \left(\frac{29}{30} \times 10\text{MW} + \frac{1}{30} \times 0\text{MW} \right) = 3.85\text{MWh}$$

$$\text{Total unadjusted outage quantity}_2 = 330\text{MW} - (3.85\text{MWh} \times 2) = 320.3\text{MW}$$

In both scenarios, the Scheduled Generators possessed the same availability and were capable of running at full load, 330MW, for all but one minute of the trading interval.

Furthermore, the Scheduled Generators tripped at the same time. It is evident that the application of the proposed determination of total unadjusted outage quantity for a Scheduled Generator results in discrimination between capacity and availability.

Synergy recommends that a more accurate and equitable representation of total unadjusted outage quantity should be based on the average Available Capacity.

Application of this concept would result in the same outcome for both Scenario 1 and Scenario 2. As the Scheduled Generator had 330MW of available capacity, the total unadjusted outage quantity would therefore be the same, regardless of the dispatch instructions.

$$\begin{aligned} \text{Total unadjusted outage quantity} \\ = \text{Maximum sent out capacity} - \text{Average available capacity} \times 2 \end{aligned}$$

$$\text{Average available capacity} = \frac{1}{2} \times \left(\frac{29}{30} \times 330\text{MW} + \frac{1}{30} \times 0\text{MW} \right) = 159.5\text{MWh}$$

$$\text{Total unadjusted outage quantity} = 330\text{MW} - (159.5\text{MWh} \times 2) = 11\text{MW}$$

In proposing this option, Synergy notes that the Rule Change Panel requires a viable alternative that is:

- a) easily auditable;
- b) able to provide appropriate Available Capacity values for use in Minimum Theoretical Energy Schedule (TES) calculations;
- c) reasonably inexpensive to implement and operate; and
- d) suitable for both Synergy and Independent Power Producer Facilities.

Synergy wishes to highlight that these requirements do not form part of the Wholesale Electricity Market (WEM) Objectives, although Synergy does understand the merit in a viable solution that satisfies these requirements.

Although not 'easily' auditable, as a 'readily' auditable solution, Synergy notes that Market Participants are able to record qualitative details as part of the logging of the Forced Outage. Furthermore, System Management monitor dispatch compliance minute by minute and have real-time visibility of plant output and operating status. Although this may require additional effort to administer, the ERA has the option to request information from System Management that would allow them to identify the time at which the generator deviated from instructions as well as infer incidents of Forced Outages (for instance, where a Market Generator is consistently generating below their dispatch instruction).

The Rule Change Panel also requires a solution that is able to provide appropriate Available Capacity values for use in Minimum TES calculations which are used in the determination of constrained payments. Under clause 6.15.2(a)ii of the Wholesale Electricity Market (WEM) Rules, the Minimum TES for a Balancing Facility which is a Scheduled Generator and subject to an outage in a trading Interval equals the maximum amount of sent out energy, in MWh, which could have been dispatched given the Available Capacity for that Trading Interval.

Synergy proposes that a Scheduled Generator subject to an Outage should forego constrained payments and the Minimum TES should equal the maximum sent out capacity.

The effect of which is consistent with the application of the Rule Change Panel's proposed determination of total unadjusted outage quantity on Minimum TES.

$$\text{Minimum TES} = \text{Maximum sent out capacity} - \text{total unadjusted outage quantity}$$

$$\begin{aligned} \text{Total unadjusted outage quantity} \\ = \text{Maximum sent out capacity} - (\text{Sent Out Metered Scheduled} \times 2) \end{aligned}$$

$$\begin{aligned} \text{Minimum TES} = \text{Maximum sent out capacity} - (\text{Maximum sent out capacity} \\ - (\text{Sent Out Metered Scheduled} \times 2)) \end{aligned}$$

$$\therefore \text{Minimum TES} = \text{Sent Out Metered Scheduled} \times 2$$

Synergy's proposal satisfies the Rule Change Panel's condition for a solution that is reasonably inexpensive to implement and is suitable for both Synergy and Independent Power Producer Facilities.

Section 4.6: Reporting Forced Outages in SMMITS

Question 19: *Whether the time periods in the proposed obligation to report extended Forced Outages in SMMITS (i.e. to report within 24 hours if the outage period exceeds 24 hours) is appropriate or whether different time periods should be used.*

Although supportive of the principle, Synergy considers that imposing a 24 hour obligation to log an extended Forced Outage in SMMITS if the outage period exceeds 24 hours is an administrative burden and will create unnecessary exposure to compliance breaches.

Market Generators may not be able to adhere to the 24 hour timeframe due to various reasons including staffing availability, competing priorities and time required to investigate the cause. For instance, if a Market Generator held expectations that a Facility would return within 23 hours, however, it took slightly longer, the Market Generator would be subject to a breach.

Synergy does not consider this scenario ideal and may expose the market to adverse scenarios where Rule Participants tentatively report Forced Outages in SMMITS within 24 hours based on limited information to avoid non-compliance. This behaviour would reduce the transparency benefits originally intended for Rule Participants as part of the rule change.

Allowing Rule Participants to comply with the timeframe on a reasonable endeavours basis would minimise concerns.

Question 21: *Any concerns about the proposed requirement to update existing Forced Outage records within 1 Business Day of receiving more accurate information about the end time or outage quantity?*

Again, Synergy is supportive of the general intent of the proposition and as a recurring theme, suggests that this obligation also be based on reasonable endeavours.

This may lead to a more efficient outcome where Rule Participants are able to update existing Forced Outage records with their reasonable estimate of the end time within the designated timeframe. Rule Participants could then apply reasonable endeavours to update records upon receiving more accurate information with full and final details due within 15 days.

By advocating a 'best endeavours' approach, Rule Participants may avoid being penalised for not updating records due to the inability to meet the strict 1 Business Day timeframe. It is

difficult to plan for uncertainty and enacting such a prescriptive rule may become problematic.

The wording of the proposed requirement is also open to interpretation and could be improved.

For instance, at what point should '1 Business Day start counting? If meter data is received at 3:00 PM on Monday but it was only determined to be accurate as at 4:00 PM on Tuesday, the Rule Participant would have technically received 'more accurate information' at 3:00 PM on Monday and would therefore be obligated to update existing Forced Outage records by 3:00 PM on Tuesday. Or, should the allowance for 1 Business Day to update records commence timing from 4:00 PM at which point it was determined that the information was accurate?

In addition, materiality should be considered to limit the administrative burden on Rule Participants. Rule Participants should not be required to comply to the timeframes above if the 'more accurate information' results in immaterial changes to the end time of the outage quantity. Synergy notes, however, that further thought as to what signifies as 'material' may be required.

Synergy does not wish that the transparency benefits obtained through this proposed rule change is overshadowed by the unwarranted exposure to non-compliance.

2. Please provide an assessment whether the change will better facilitate the achievement of the Wholesale Market Objectives.

Synergy considers that amending some of the prescriptive rule changes to allow for reasonable endeavours will better facilitate the achievement of the Wholesale Market Objectives with regards to efficiency.

However, Synergy considers that the current proposed approach for reporting unadjusted outage quantities for Scheduled Generators that have failed to comply with an instruction from System Management fails to facilitate the achievement of the Wholesale Market Objectives in that it results in discrimination against Market Generators with differing dispatch instructions (Wholesale Market Objective 3).

Synergy's proposed alternative solution removes discrimination between capacity and unavailability would pose a more economically efficient alternative and succeeds in minimising the long-term costs of energy through its proposal to forego constrained on payments where the generator is subject to an outage.

3. Please indicate if the proposed change will have any implications for your organisation (for example changes to your IT or business systems) and any costs involved in implementing these changes.

Synergy notes that updates to the Trading system will be required to reflect some of the changes proposed in the Proposal. Education to generation site staff and Traders will also be required. However, Synergy has yet to ascertain the costs involved with these changes.

In addition, Synergy understands that since the original submission of the Proposal, a significant time has transpired, such that by the time in which the consultation process has finalised, the new market will be set to start in slightly over two years' time.

Although the Rule Change Panel has "considered the work of the Energy Transformation Implementation Units (ETIU) as part of the Energy Transformation Strategy (ETS) in the development of this call for further submissions", it is beneficial to examine further as to how these amendments are likely to be aligned with the outcomes of the new market start.

4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.

Synergy is currently unable to adequately determine the time required to implement all the proposed changes should it be accepted as proposed. Synergy will be better positioned to determine this once the draft Amending Rules which reflect these proposed changes are published.
